

**BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES  
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application No.: 09/841,644

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**SUPPLEMENTAL BRIEF**

Sir:

Responsive to the Notification of Non-Compliant Appeal Brief, mailed 15 July 2009, enclosed is a revised Summary of Claimed Subject Matter section for consideration in connection with the present appeal in this matter.

If there are any additional fees due in connection with this communication, please charge Deposit Account No. 19-3140.

Respectfully submitted,

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## SUMMARY OF CLAIMED SUBJECT MATTER

Claims 1, 11 and 39 are independent claims in this application and read as follows:<sup>1</sup>

1. In an interactive television (TV) environment  
[Specification at 0020], a method comprising:  
    recognizing, using a pattern engine [Specification at 0036, 0040; Fig. 3 at 305], one or more patterns in an unmodified broadcast data stream [Specification at 0049; Fig. 7 at 702];  
    accessing a repository [Specification at 0036, 0039; Fig. 3 at 304A] storing attributes [Specification at 0043; Fig. 6B at 625-1 - 625-N] concerning interactive TV triggers [Specification at 0043; Fig. 6B at 630-1 - 630-N] to be inserted into the broadcast data stream [Specification at 0042; Fig. 6A at 600] and determining whether a pattern recognized by the pattern engine is to be associated with a one of the interactive TV triggers [Specification at 0050; Fig. 7 at 704];  
    and, if so, then  
        prior to broadcasting, automatically inserting [Specification at 0047; Fig. 5 at 504] an interactive TV trigger determined to be associated with a recognized pattern into the broadcast data stream [Specification at 0052; Fig. 7 at 708].

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<sup>1</sup> Reference numbers as used in the drawings have been inserted in accordance with 37 C.F.R. §41.37(c)(1)(v). The use of such reference numbers should in no way be read as limiting the claim to the illustrated embodiment.

11. In an interactive television (TV) system environment [Specification at 0020], a system comprising:  
an insertion platform [Specification at 0020, 0023-0025, 0035; Fig. 1A at 110 and Fig. 3 at 110] configured to recognize [Specification at 0049; Fig. 7 at 702], using a pattern engine [Specification at 0036, 0040; Fig. 3 at 305], one or more patterns in an unmodified broadcast data stream; access a repository [Specification at 0036, 0039; Fig. 3 at 304A] storing attributes [Specification at 0043; Fig. 6B at 625-1 - 625-N] concerning interactive TV triggers [Specification at 0043; Fig. 6B at 630-1 - 630-N] to be inserted into the broadcast data stream [Specification at 0042; Fig. 6A at 600]; determine [Specification at 0050; Fig. 7 at 704] whether a pattern recognized by the pattern engine [Specification at 0036, 0040; Fig. 3 at 305] is to be associated with a one of the interactive TV triggers; and, if so, then to insert automatically [Specification at 0047; Fig. 5 at 504, and Specification at 0052; Fig. 7 at 708], and prior to broadcasting the data stream, those of the interactive TV triggers determined to be associated with recognized ones of the patterns into an unmodified broadcast data stream.

39. A tangible machine-readable medium encoded with computer-executable instructions, which if executed by a computer, cause the computer to perform an operation comprising:

recognizing [Specification at 0049; Fig. 7 at 702], using a pattern engine [Specification at 0036, 0040; Fig. 3 at 305], a media pattern [Specification at 0042; Fig. 6A at 602] in an unmodified broadcast data stream [Specification at 0042; Fig. 6A at 600];

accessing a repository [Specification at 0036, 0039; Fig. 3 at 304A] storing attributes [Specification at 0043; Fig. 6B at 625-1 - 625-N] concerning interactive TV triggers [Specification at 0043; Fig. 6B at 630-1 - 630-N] to be inserted into the broadcast data stream [Specification at 0042; Fig. 6A at 600] and determining [Specification at 0050; Fig. 7 at 704] whether the media pattern [Specification at 0042; Fig. 6A at 602] recognized by the pattern engine [Specification at 0036, 0040; Fig. 3 at 305] is to be associated with an interactive element; and, if so, then prior to broadcasting, automatically inserting [Specification at 0047; Fig. 5 at 504, and Specification at 0052; Fig. 7 at 708] the interactive element determined to be associated with the media pattern into the broadcast data stream.

As is apparent from these independent claims, the present invention concerns methods and systems for use in an interactive television (iTV) environment, in particular, methods and system which allow for the automated insertion of iTV triggers into a broadcast data stream, prior to the broadcast of that data stream.

As explained in the present application, iTV environments allow users to interact with a broadcast or service being provided. This may include enhanced, interactive content (“interactive content”) such as a Universal Resource Locator (URL) address in which a TV user can select to access a website on the Internet or World Wide Web at the selected URL address. However, conventional iTV systems require broadcasters to manually modify each television program to add such interactive content prior to broadcasting. As such, a great deal of effort is needed to bring interactive content to iTV users and so the industry has experienced unwanted delay in deploying interactive content with broadcast programs. Specification at [0003] - [0004].

To overcome these deficiencies in the art, the present invention provides for automatic insertion of iTV triggers into a broadcast data stream, for example based on the recognition of

one or more elements within the broadcast data stream. In particular, a recognized element can trigger the insertion of the interactive TV trigger into the broadcast data stream. Specification at [0005]. The iTV trigger can be based any of a variety of interactive content industry standard formats, for example those published by the Advanced Television Enhancement Forum (ATVEF) for Transport Type A or Transport Type B, or other formats. Specification at [0019]. When a television with a set-top box is used to receive and display a broadcast with an iTV trigger inserted therein, the iTV trigger can be used to retrieve information from web server (or other resource) for display on the TV. Specification at [0020].

To facilitate the automated insertion of the iTV triggers into the unmodified broadcast data stream, the present invention provides an insertion platform architecture. This insertion platform architecture automatically inserts iTV triggers into a broadcast data stream based on elements contained within that broadcast data stream. These elements are recognized using a pattern engine within the insertion platform architecture and comparing same to attributes stored in a database accessible to the insertion platform architecture. Thus, when elements within the broadcast data stream are deemed to match one of the stored attributes, the insertion platform architecture automatically inserts iTV triggers into the broadcast data stream. Specification at [0024] - [0025], [0033], and [0039] - [0040].

By way of illustrative example, suppose an advertisement for a particular clothing store is being broadcast. Then, the insertion platform architecture may be used to automatically insert an iTV trigger in the form of a URL for the clothing store's web site into the broadcast data stream so as to be concurrently displayed on a TV with the advertisement. A user using a remote control may select the URL to visit the company's web site. Specification at [0028] - [0029].